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(54) **METHOD OF AGGREGATING BUSINESS AND SOCIAL NETWORKS**

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G06Q 50/00	(2012.01)
G06Q 10/10	(2012.01)
H04L 12/58	(2006.01)

(52) **U.S. Cl.**

CPC ***G06Q 30/02*** (2013.01); ***G06Q 50/01*** (2013.01); *G06Q 10/10* (2013.01); *H04L 12/588* (2013.01)

(58) **Field of Classification Search**

CPC G06Q 30/02; G06Q 50/01; G06Q 10/10; H04L 12/588

USPC 709/204

See application file for complete search history.

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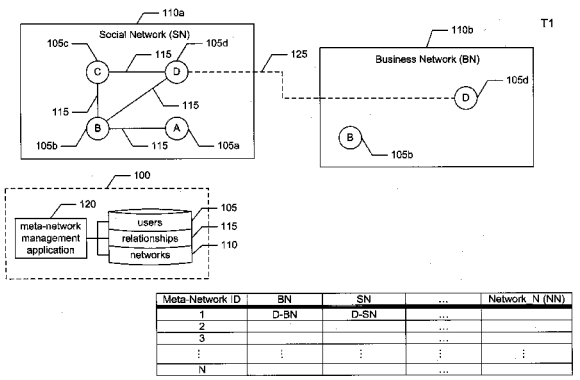
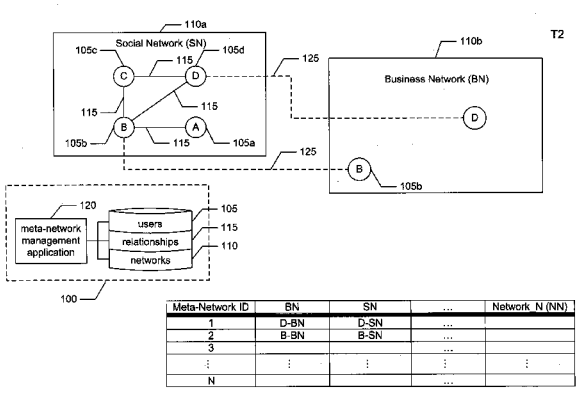
(57) **ABSTRACT**

A method and system for facilitating relationships across multiple networks is described. The meta-network includes relationship information describing users, the networks to which such users belong, and the relationships that they have established within such networks. When a relationship is established in a network, it can be used to propagate relationships across any number of networks with the same or different users. The meta-network enhances the users' ability to search for information and manage their relationships across multiple networks. A user can search for other users according to one or more user-specified attributes. One or more users satisfying the user-specified attributes are identified, and a similarity measure may be determined for each of the identified users. A mapping interface is displayed to the user to enable the user to visually compare the identified users having a similarity measure within the displayed range. The mapping interface allows the user to invite one or more of the displayed users to establish a relationship with the user.

21 Claims, 12 Drawing Sheets





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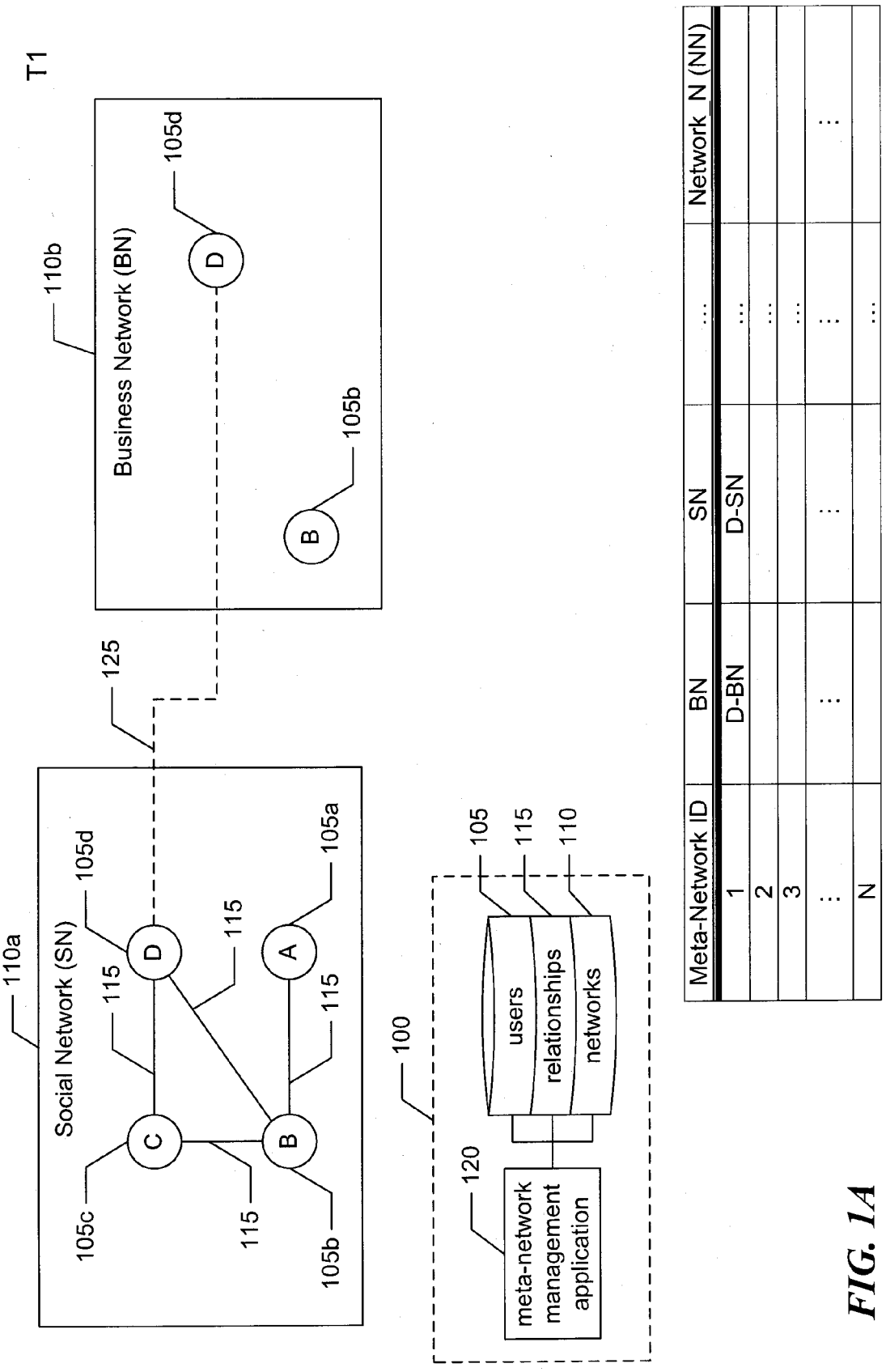
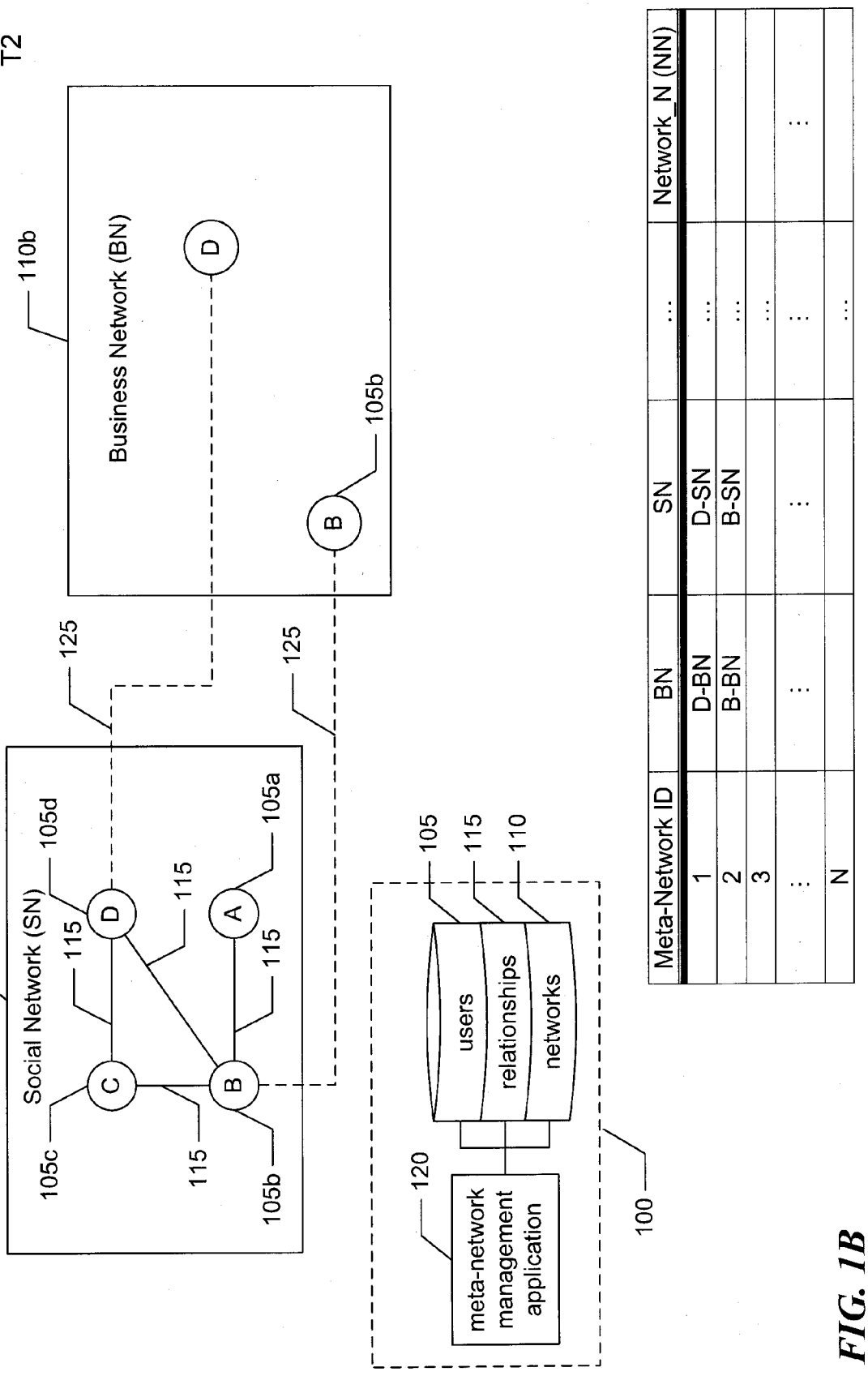


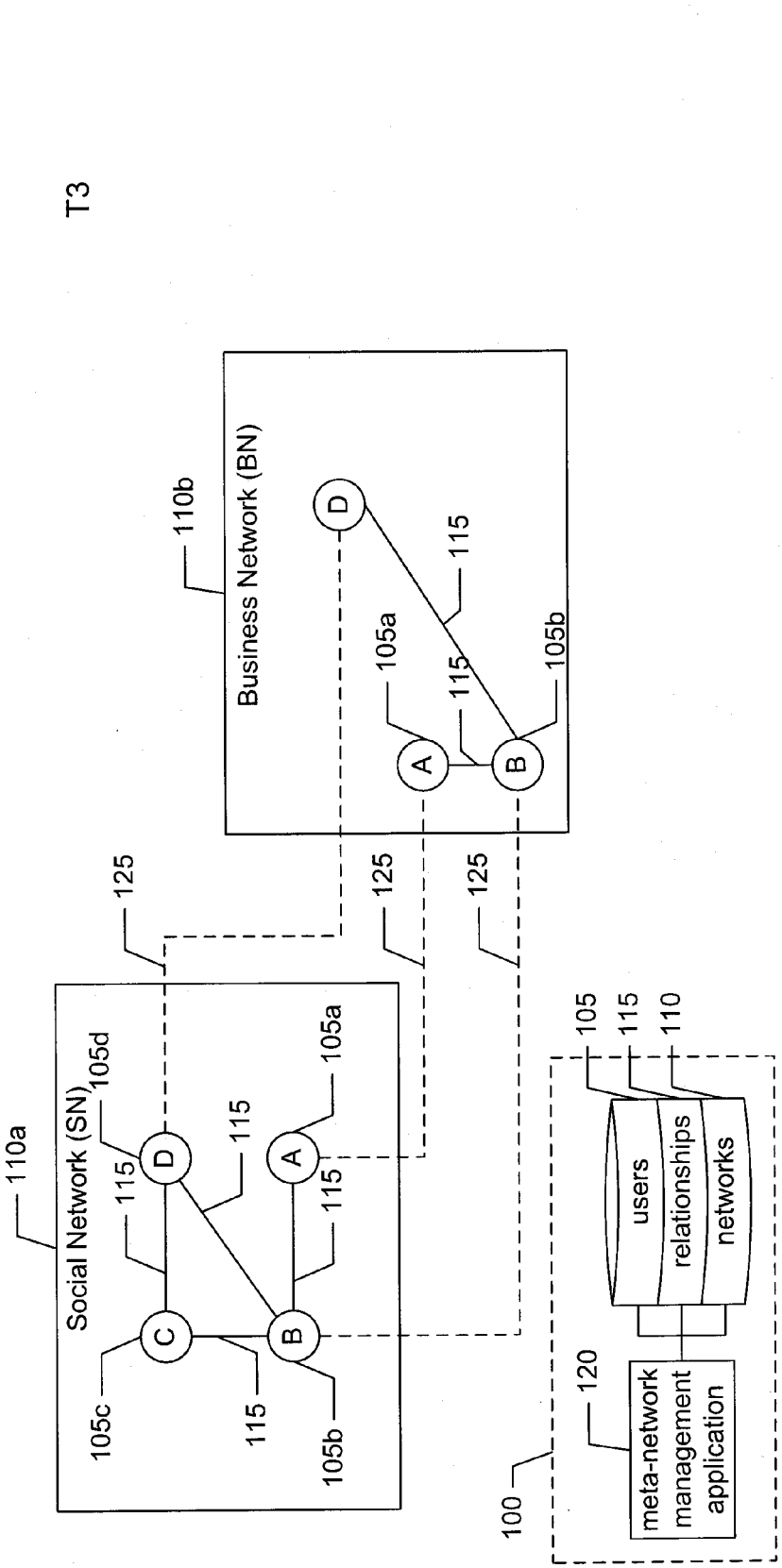
Meta-Network ID	BN	SN	...	Network_N (NN)
1	D-BN	D-SN	...	
2			...	
3			...	
...	...	...	...	...
N			...	

FIG. 1A



Meta-Network ID	BN	SN	...	Network_N (NN)
1	D-BN	D-SN	...	
2	B-BN	B-SN	...	
3			...	
...	...	...	...	...
N			...	

FIG. 1B



Meta-Network ID	BN	SN	...	Network_N (NN)
1	D-BN	D-SN	...	
2	B-BN	B-SN	...	
3	A-BN	A-SN	...	
...	...	...	...	...
N			...	

FIG. 1C

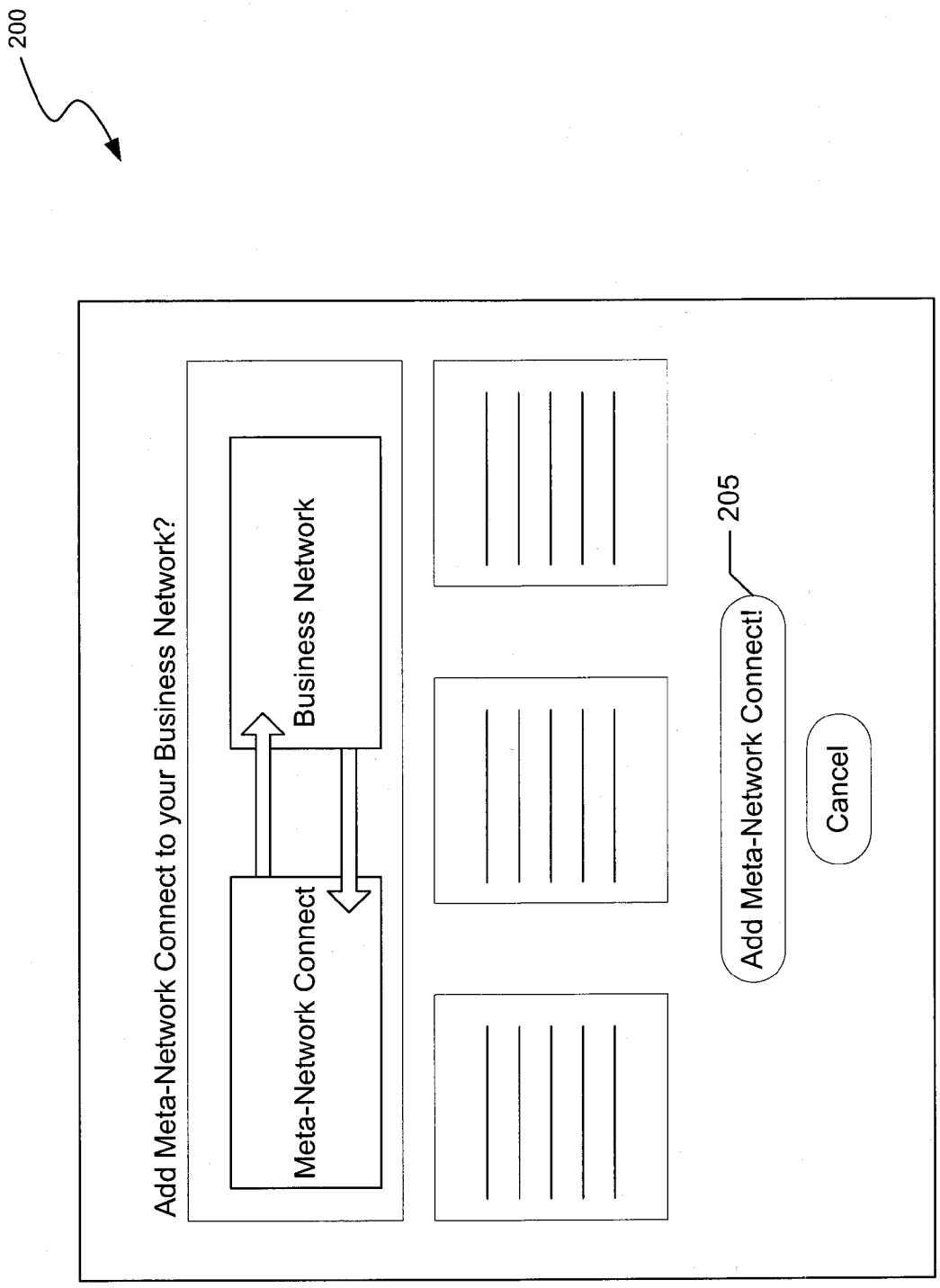

200
Add Meta-Network Connect to your Business Network?
Business Network
Meta-Network Connect
205
Add Meta-Network Connect!
Cancel

FIG. 2

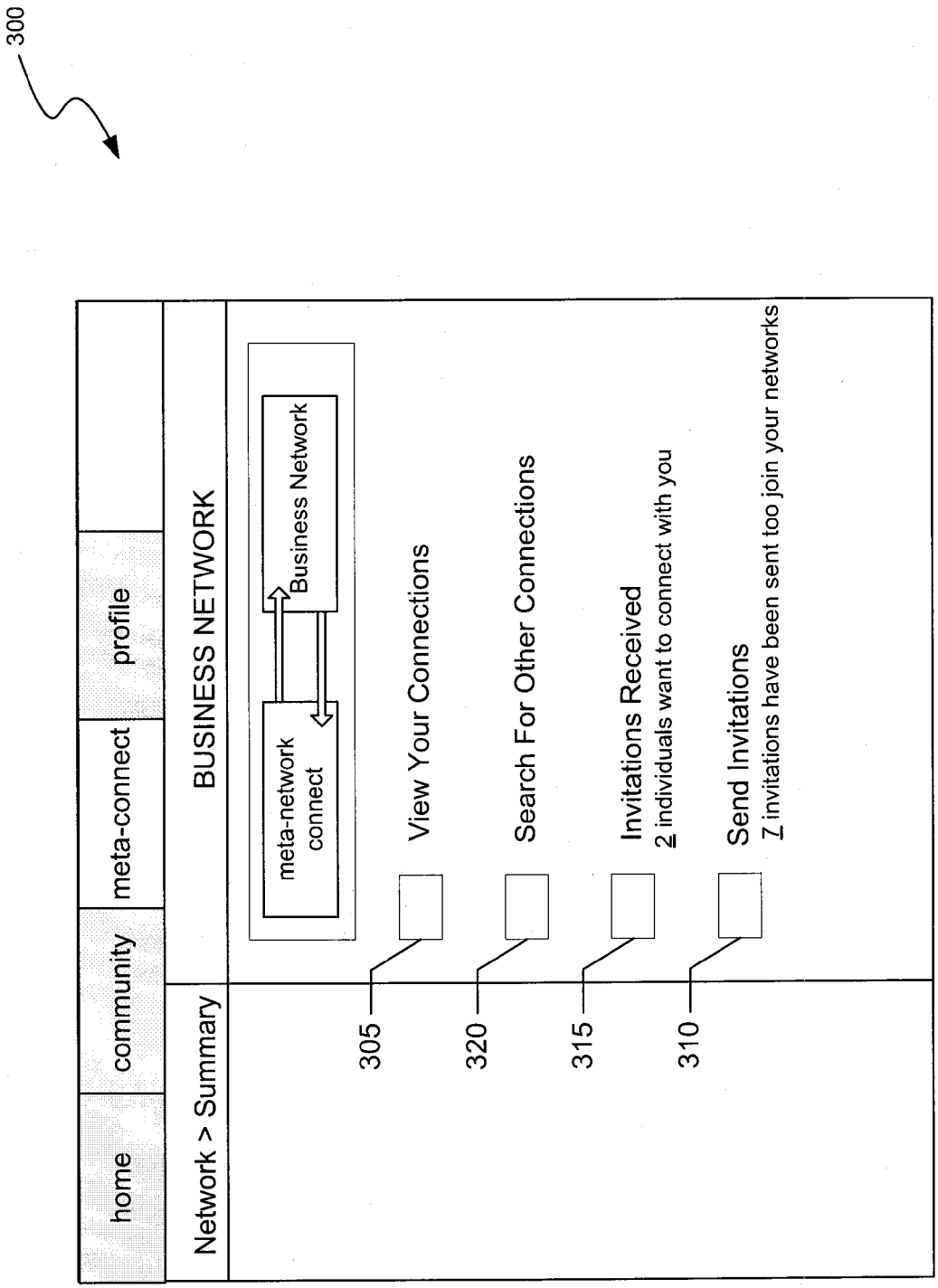

300
home
community
meta-connect
profile
Network > Summary
BUSINESS NETWORK
meta-network connect
Business Network
View Your Connections
Search For Other Connections
Invitations Received
2 individuals want to connect with you
Send Invitations
7 invitations have been sent too join your networks
305
320
315
310

FIG. 3

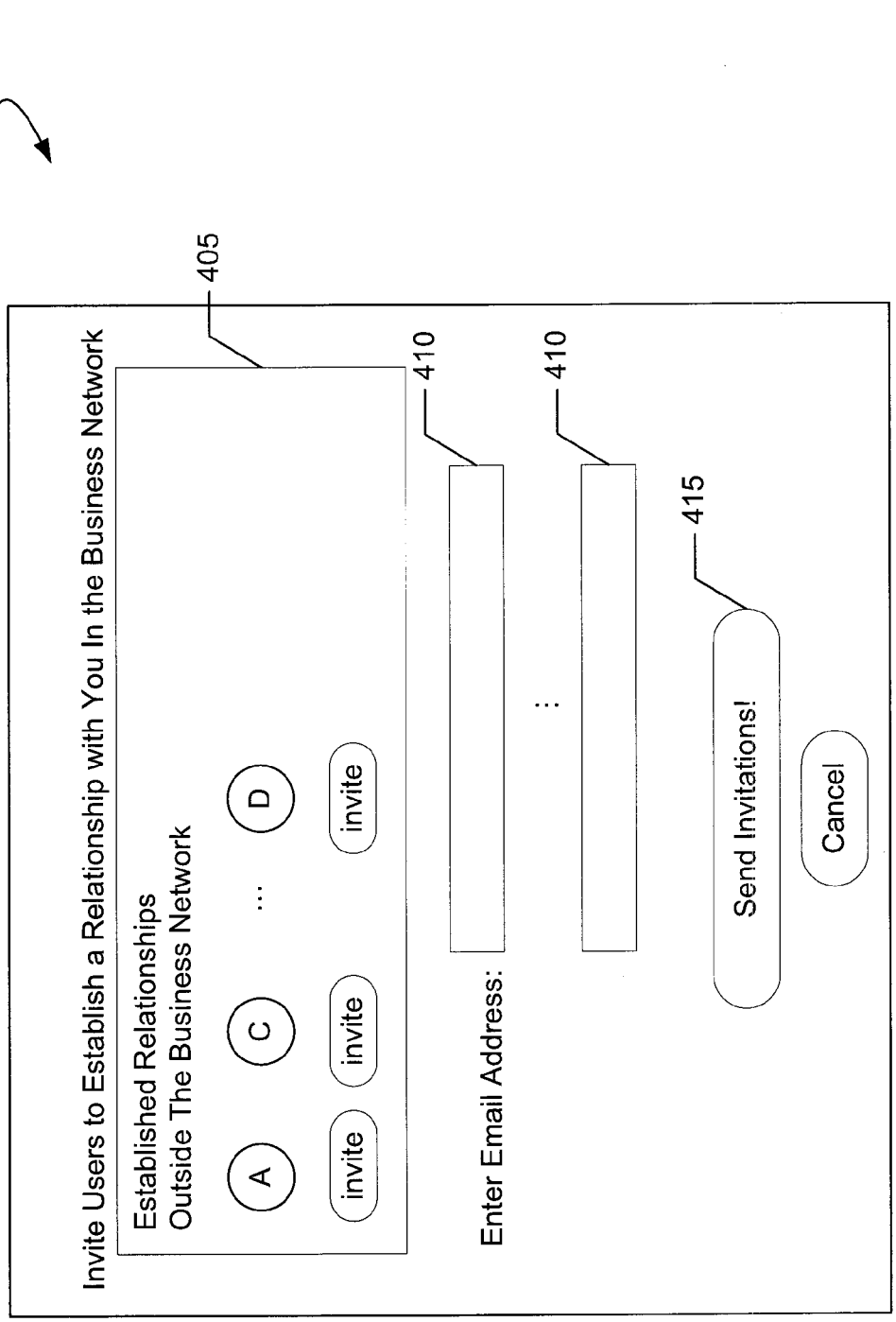

400
405
Invite Users to Establish a Relationship with You In the Business Network
Established Relationships
Outside The Business Network
A
C
...
D
invite
invite
invite
410
410
Enter Email Address:
415
Send Invitations!
Cancel

FIG. 4

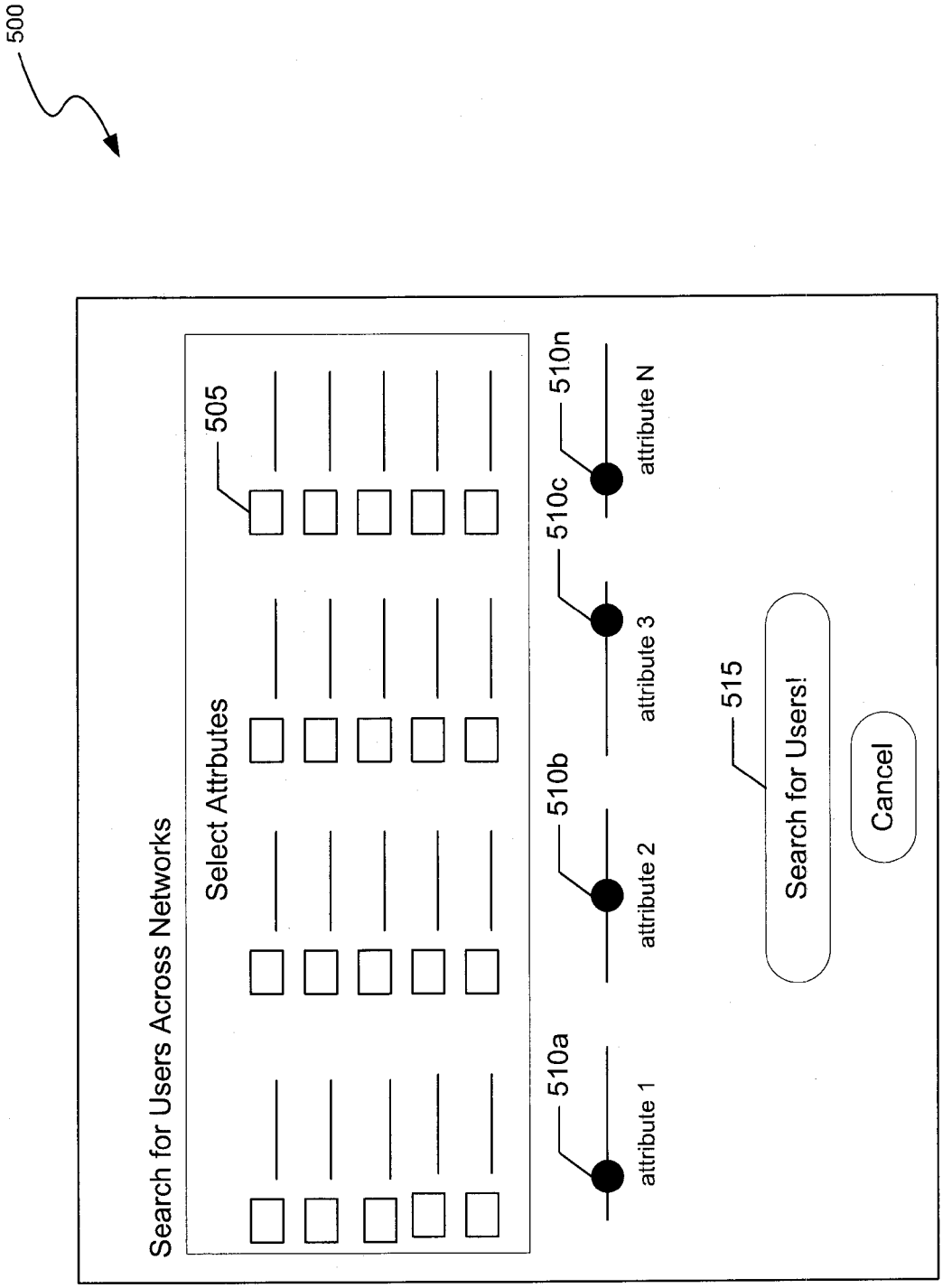

500
Search for Users Across Networks
Select Attributes
505
510a
attribute 1
510b
attribute 2
510c
attribute 3
510n
attribute N
515
Search for Users!
Cancel

FIG. 5

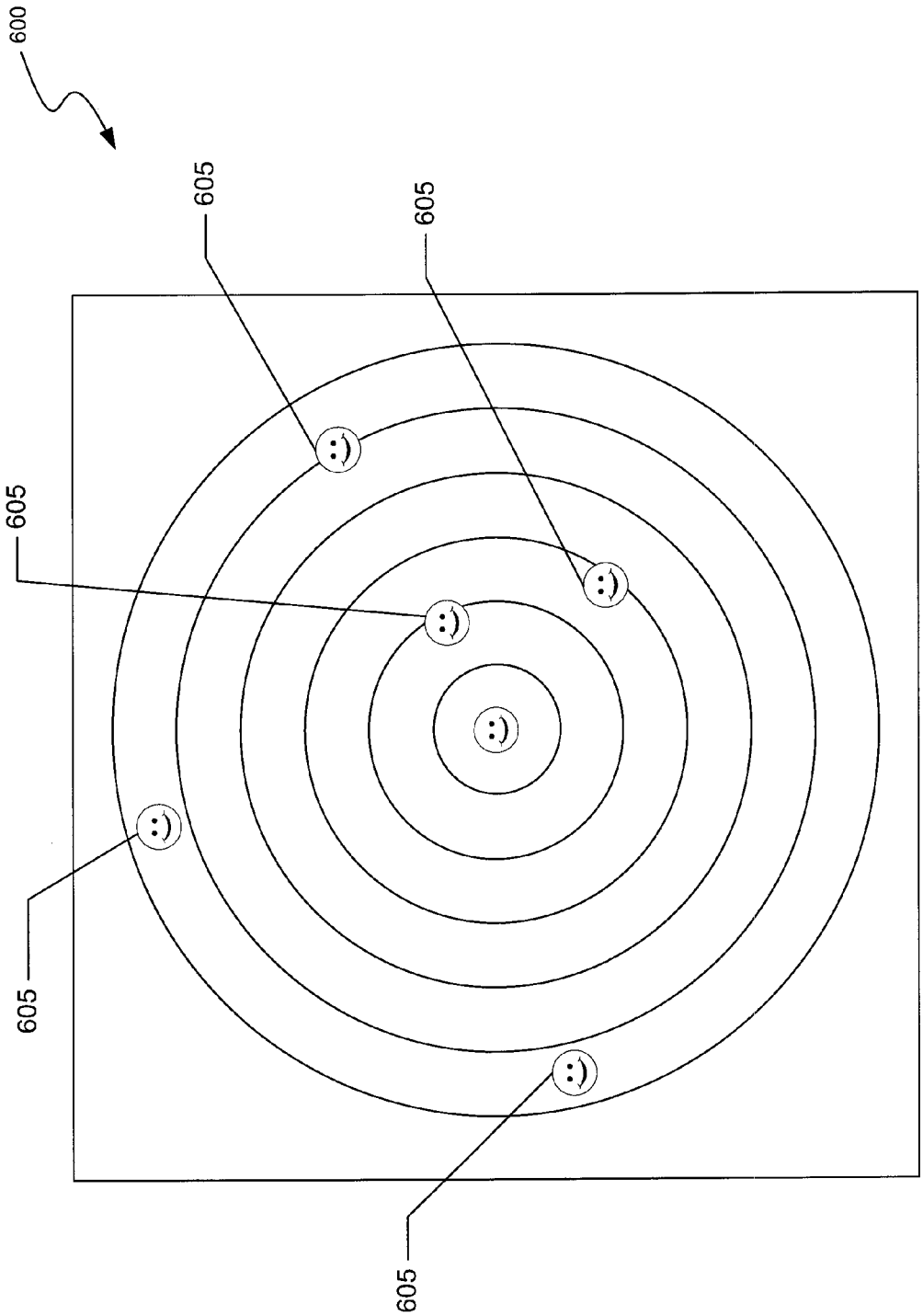


FIG. 6

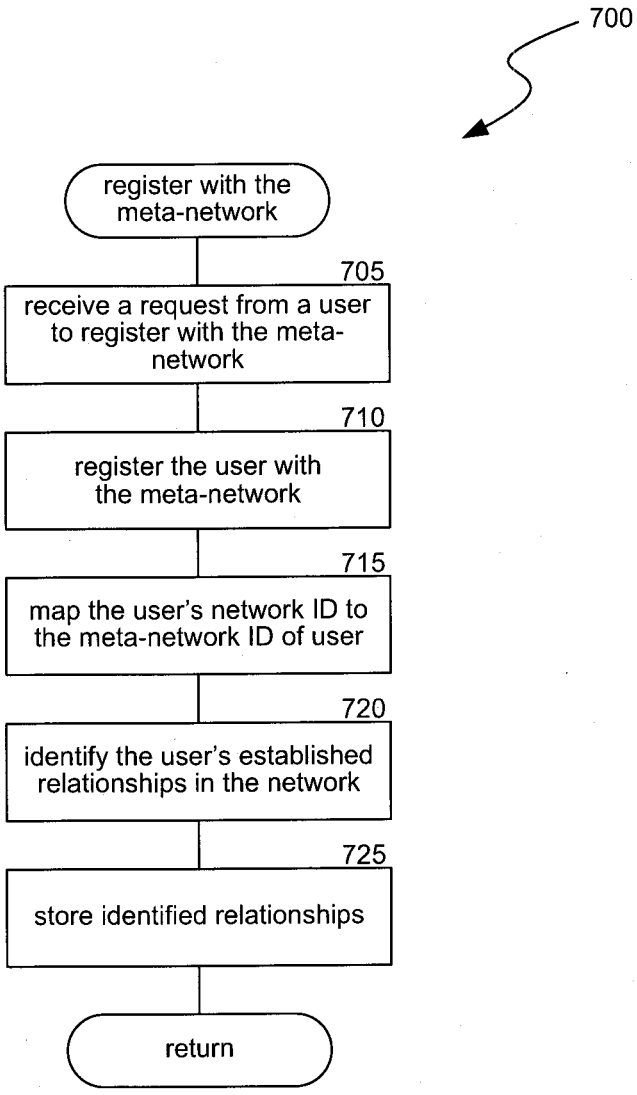

700
register with the meta-network
705
receive a request from a user to register with the meta-network
710
register the user with the meta-network
715
map the user's network ID to the meta-network ID of user
720
identify the user's established relationships in the network
725
store identified relationships
return

FIG. 7

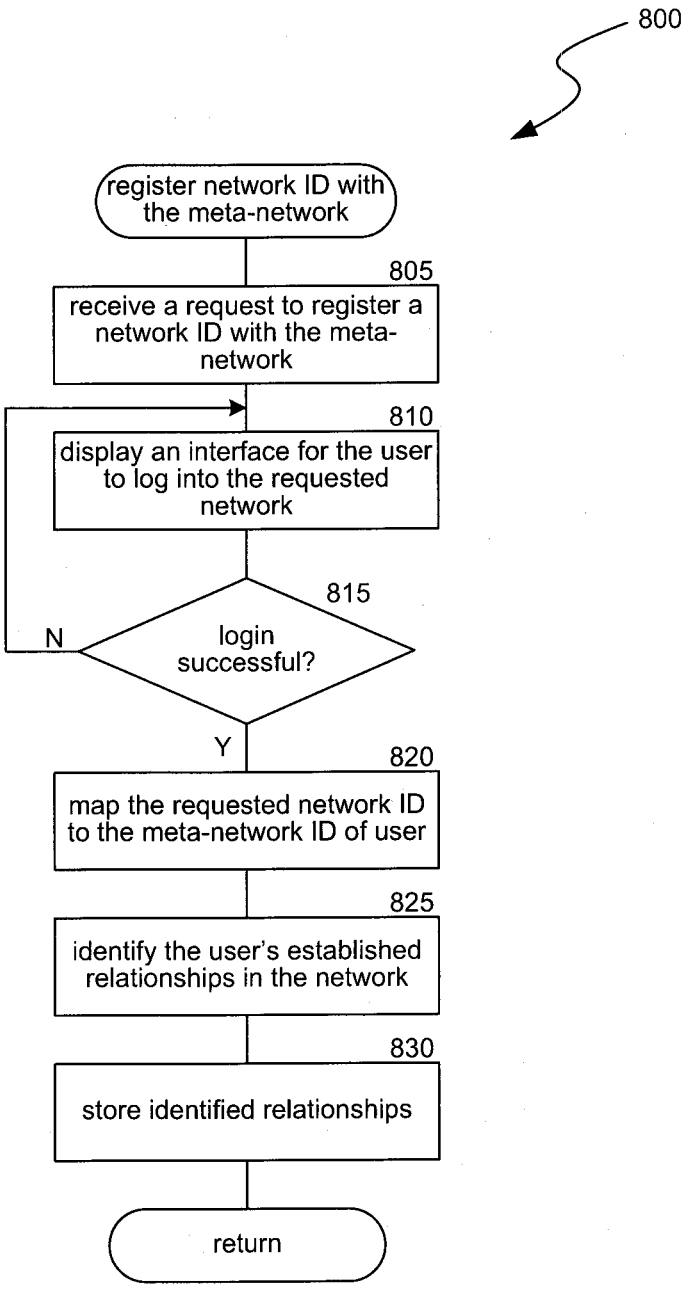

800
register network ID with the meta-network
805
receive a request to register a network ID with the meta-network
810
display an interface for the user to log into the requested network
815
login successful?
N
Y
820
map the requested network ID to the meta-network ID of user
825
identify the user's established relationships in the network
830
store identified relationships
return

FIG. 8

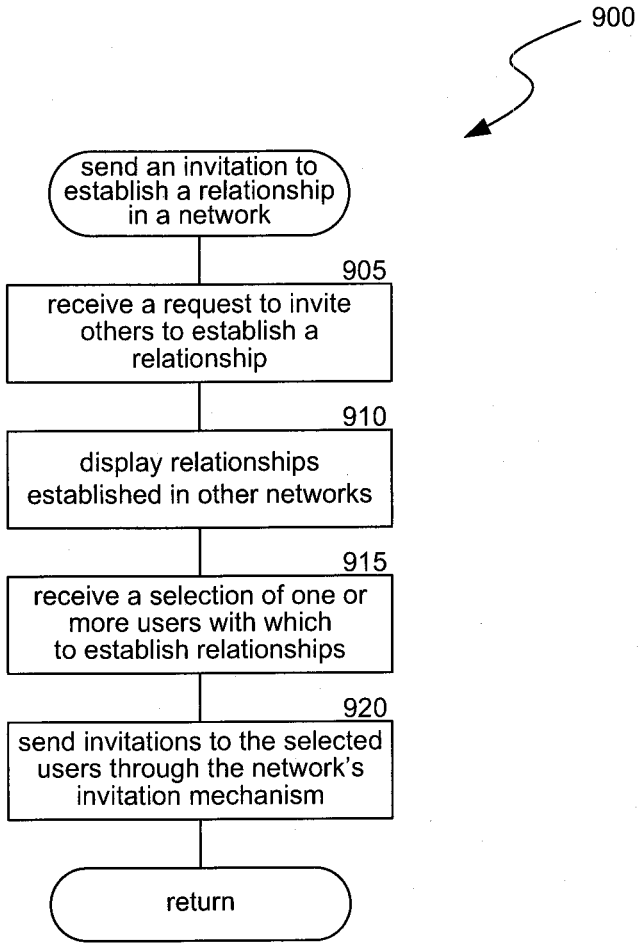

900
send an invitation to establish a relationship in a network
905
receive a request to invite others to establish a relationship
910
display relationships established in other networks
915
receive a selection of one or more users with which to establish relationships
920
send invitations to the selected users through the network's invitation mechanism
return

FIG. 9

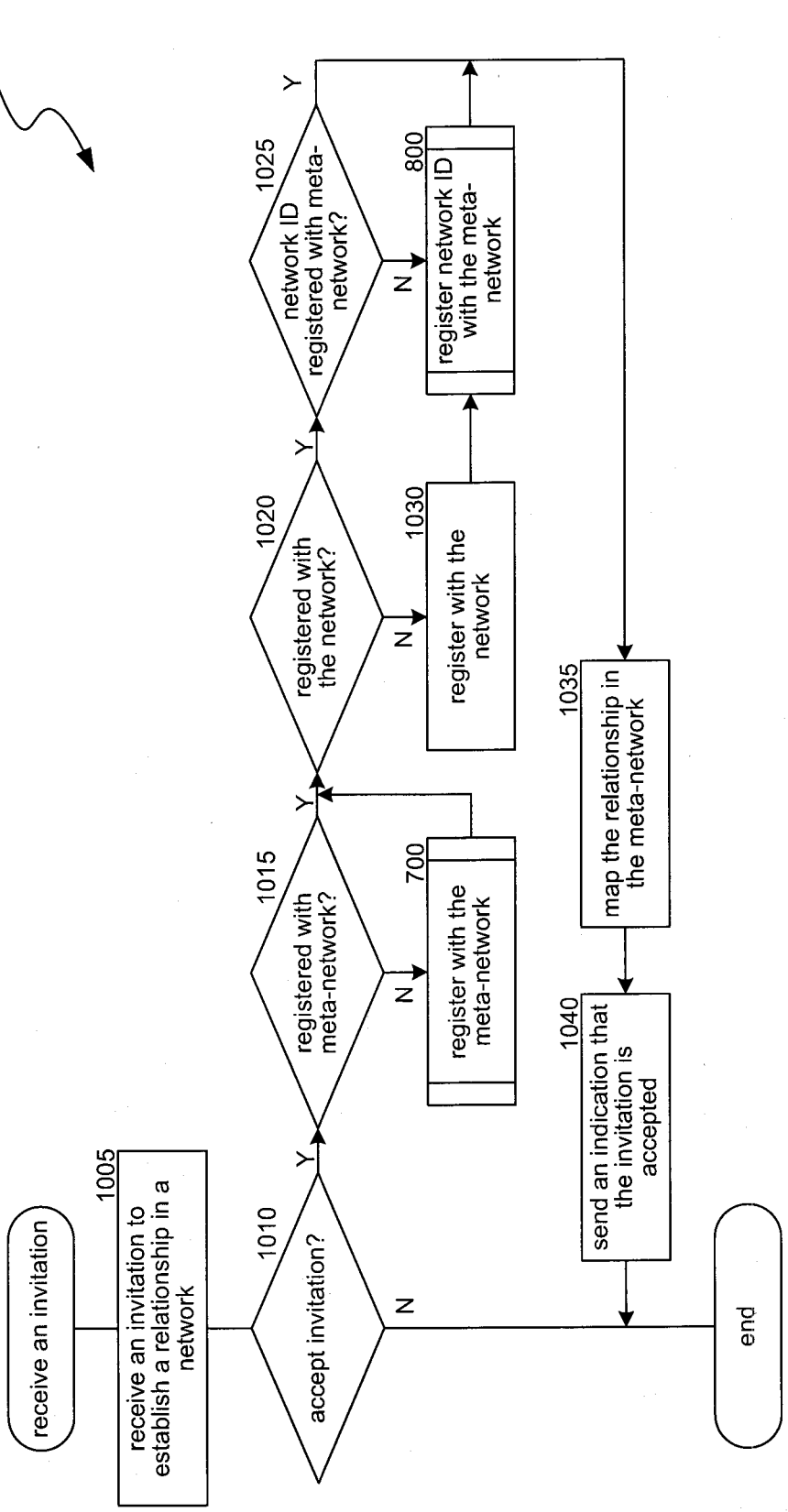

1000
receive an invitation
1005
receive an invitation to establish a relationship in a network
1010
accept invitation?
Y
N
1015
registered with meta-network?
Y
N
700
register with the meta-network
1020
registered with the network?
Y
N
1030
register with the network
1025
network ID registered with meta-network?
Y
N
800
register network ID with the meta-network
1035
map the relationship in the meta-network
1040
send an indication that the invitation is accepted
end

FIG. 10

METHOD OF AGGREGATING BUSINESS AND SOCIAL NETWORKS

BACKGROUND

Computers increasingly serve as tools through which people interact and communicate with each other. As a result, many types of networks have developed to facilitate communication. Such network types include, for example, social networks, dating networks, business networks, education networks, commerce networks, political networks, and so forth. Typically, such networks are formed through an initial set of users who invite other users to join their network. For example, after registering with a social network (e.g., Facebook) and creating an account, a user, Jill, may invite her college friends to join the social network. As another example, after registering with a business Network (e.g., LinkedIn) and creating an account, Jill may also invite her business partners to join the business network. Thus, Jill would use the social network when dealing with social issues, and use the business network when dealing with business issues.

People often have both social and business relationships with the same person. For example, Jack, a classmate of Jill, may have previously accepted an invitation from Jill to join the social network and to establish a social relationship with her. Some years later, when Jill starts doing business with Jack, Jill would also like to establish a business relationship with Jack through the business network. Jill could invite Jack to also join the business network and to establish a business relationship with her. If Jack accepts, then they both belong to two separate networks with a relationship in each network. If Jill and Jack share other similar interests (e.g., environmental, political, or religious), then they may want to establish relationships in other type of networks.

As relationships between people evolve over time and accounts and relationships established with multiple networks, it can be difficult for a person to identify such relationships, to track the people with whom the person has established relationships, and to communicate those people. For example, Jill may need to log on to three different networks, each with different user interfaces, to compile a list of all persons with whom Jill has an established relationship. If Jill has a relationship established with Jack in a social network and Jack has an account in a business network, Jill may not even know of Jack's business or that a business relationship may be mutually beneficial. Thus, even though two people have a relationship established in one network, they may not be aware that they both have an interest and an account in another network (e.g., a political network). In such a case, the people may never become aware that they share such a common interest.

SUMMARY

A meta-network is provided that stores information describing users, the networks to which such users belong, and relationships established in such networks between users. The meta-network facilitates establishing relationships across multiple networks. That is, when a relationship is established in one network, it can be used to propagate relationships in other networks between the same or different users. In some embodiments, the meta-network enables users to search for other users according to one or more specified attributes. Users matching the specified attributes may be identified, and a similarity measure may be determined for each of the identified users. In some embodiments, a mapping interface based on the determined similarity measures is displayed to enable the user to visually compare the identified users having a similarity measure within the specified attribute range.

This Summary is provided to introduce a selection of concepts in a simplified form that are further described in the Detailed Description. This Summary is not intended to identify key features or essential features of the claimed subject matter, nor is it intended to be used as an aid in determining the scope of the claimed subject matter.

BRIEF DESCRIPTION OF THE DRAWINGS

FIGS. **1**A, **1**B, and **1**C are block diagrams that illustrate a user registering with the meta-network and establishing relationships with other users in one embodiment.

FIG. **2** illustrates a sample user interface presented to a user to initiate the meta-network registration process in one embodiment.

FIG. **3** illustrates a sample meta-network connection interface in one embodiment.

FIG. **4** illustrates a sample user interface presented to a user to enable the user to invite one or more users to establish a relationship with the user in a network, in one embodiment.

FIG. **5** illustrates a sample user interface presented to a user to enable the user to search for other users across any network registered with the meta-network in one embodiment.

FIG. **6** illustrates a sample user interface presented to a user in response to a search in one embodiment.

FIG. **7** is a flow diagram that illustrates a process used to register a user with the meta-network in one embodiment.

FIG. **8** is a flow diagram that illustrates a process used to register a network identifier of user with the meta-network in one embodiment.

FIG. **9** is a flow diagram that illustrates a process used to invite one or more users to establish a relationship with the user in a network, in one embodiment.

FIG. **10** is a flow diagram that illustrates a process used to respond to a received invitation in one embodiment.

DETAILED DESCRIPTION

A meta-network is provided that stores information describing users registered with the meta-network, the other networks to which such users belong, and relationships established in such networks between users. As described herein, the meta-network facilitates establishing relationships across multiple networks. When a relationship is established in one network, it can be used to propagate relationships in other networks between the same or different users. A user can create an account with a meta-network and supply their business, social, and other account information to the meta-network. Thus, the meta-network maps each meta-network user to the user's other accounts. For example, Jill may establish a meta-network account indicating that she has accounts with a business network, a social network, and an environmental network. Jack may similarly establish a meta-network account indicating that he also has accounts with each of the same three networks. The meta-network also tracks relationships between registered users of the meta-network. For example, Jill may establish a relationship with Jack in the meta-network. The meta-network uses the established relationship between two people in the meta-network and knowledge of each of their other accounts to provide to one person the list of networks of the other person, and vice versa. Thus, Jill, who previously only had a social relationship with Jack via the social network, will become aware, after establishing

a relationship with Jack in the meta-network, that Jack also belongs to a business network and an environmental network. Jill can then seek to establish relationships with Jack in each of the other networks.

In some embodiments, an existing network (e.g., business network) can be adapted to provide the functionality of the meta-network using its existing account and relationship infrastructure. In such a case, the existing network would be adapted to provide users, who are registered with the network, information about the users' other accounts. That is, the existing network may include a management application that maintains information describing the other networks to which the registered users belong and the relationships such users have established in those networks.

In some embodiments, the meta-network enables users to search for other users according to one or more specified attributes. For example, Jill may desire to search for wholesale suppliers of flour within a 25 mile radius of her bakery. It may also be very important to Jill that the suppliers only use organic wheat. Users matching the attributes specified by Jill may be identified, and a similarity measure may be determined for each of the identified users to indicate how closely they satisfy Jill's search. For example, the meta-network may identify Jack as matching Jill's search because when Jack registered with the business network he provided a variety of information describing his business, including the type of business (e.g., wholesale supplier), the products sold (e.g., organic wheat), the location, etc. In some embodiments, a mapping interface based on the determined similarity measures is displayed to enable the user to visually compare the identified users having a similarity measure within the specified attribute range.

Before describing the meta-network in greater detail, it is useful to consider an environment in which the meta-network may be implemented. FIGS. **1**A, **1**B, and **1**C are block diagrams that illustrate a user registering with the meta-network and establishing relationships with other users in one embodiment. A meta-network **100** stores information describing registered users **105**, the networks **110** to which such registered users belong, and the relationships **115** established in such networks between users. Although two networks **110***a* and **110***b* are illustrated, it will be appreciated by those skilled in the art that there may be any number of networks **110** may be included. Although the meta-network **100** in FIGS. **1**A-C is shown as a separate network with which users register independent of networks **110***a* and **110***b*, in some embodiments, one of the networks **110** functions as the meta-network.

In some embodiments, the meta-network **100** includes a management application **120** that maintains information describing registered users **105**, the networks **110** to which such registered users belong, and the relationships **115** established in such networks between users. The management application **120** enables users **105** to establish relationships with the meta-network. The management application **120** may include a search tool that enables users **105** to search for other registered users according to one or more specified attributes. The meta-network **100** may include other applications or tools not mentioned here.

As illustrated in FIG. **1**A, at time T**1** users **105***d* and **105***c* are registered with the meta-network **100**. When a user registers with the meta-network **100**, the user is assigned a meta-network identifier ("ID") that is used to map the user's network IDs. For example, as shown in table **130***a* of FIG. **1**A, user **105***d* is assigned meta-network ID **1**, which is mapped to the business network identifier of user **105***d* ("D-BN") and social network identifier of user **105***d* ("D-SN"). To facilitate description, a dashed line **125** is used to illustrate in FIGS. **1**A-C that a user **105** is registered with the meta-network **100**.

As illustrated in FIG. **1**B, at time T**2**, users **105***b*, **105***c*, and **105***d* are registered with the meta-network **100**. When user **105***b* registers with the meta-network **100**, the business network identifier of user **105***b* ("B-BN") is mapped to the assigned meta-network ID. The user **105***b* may have provided its business network **110***b* identifier to the meta-network **100**. Alternatively, if the business network **110***b* is adapted to implement the meta-network **100**, the business network will already know the business network identifier of user **105***b*.

After a user **105** registers with the meta-network, the user may register other network IDs of the user with the meta-network **100**. For example, after user **105***b* registers with the meta-network, user **105***b* may register his or her social network ID ("B-SN") with the meta-network. As shown in table **130***b* of FIG. **1**B, user **105***b* is assigned meta-network ID **2**, which is mapped to the business network identifier of user **105***b* ("B-BN") and social network identifier of user **105***b* ("B-SN").

In some embodiments, when a user registers a network ID with the meta-network, the meta-network identifies the users **105** with which that user has established a relationship. To identify such users, the meta-network invokes a relationship API exposed by the network **110**. For example, when user **105***b* registers his or her social network ID ("B-SN") with the meta-network, the meta-network invokes the relationship API of the social network **110***a* to identify the users (i.e., **105***a*, **105***c*, and **105***d*) with which user **105***b* has established a relationship.

After a user **105** has registered each of the user's network IDs with the meta-network, the user may invite other users to establish a relationship with the user in any of the user's networks **110**. For example, user **105***b* may invite user **105***a* and **105***d* to establish a relationship with user **105***b* in the business network **110***b*. To invite users **105***a* and **105***d*, the meta-network invokes the invitation API exposed by the business network **110***b*. If user **105***d* accepts the invitation, the meta-network stores an indication of the established relationship. For user **105***a* to accept the invitation, however, user **105***a* registers with the meta-network **100** and the business network **110***b*. As illustrated in FIG. **1**C, at time T**3**, users **105***a* and **105***d* have accepted user **105***b*'s invitation to establish a relationship in the business network **110***b*.

FIG. **2** illustrates a sample user interface **200** that may be presented to a user to initiate a meta-network registration process. For example when user **105***b* logs into business network **110***b*, he or she may be presented with an opportunity to add a meta-network connection ("meta-connect") interface to her business network by registering with the meta-network **100**. In some embodiments, the meta-connect interface is added to the user's network **110** as a web part, a tab, or a page.

FIG. **3** illustrates a sample meta-connect interface **300** in one embodiment. The meta-connect interface **300** may include one or more controls. For example, as illustrated, meta-connect interface **300** includes a control **305** that enables a user **105** to view his or her relationships that are established in other networks **110**. The meta-connect interface **300** also includes a control **310** that enables a user to invite other users to establish a relationship with the user, and a control **315** that enables the user to view received invitations. In some embodiments, the meta-connect interface **300** includes a control **320** that enables a user to search for other registered users across networks **110**. The meta-network connection interface may include other controls and/or interfaces not mentioned here.

FIG. **4** illustrates a sample user interface **400** that may be presented to a user to invite one or more users to establish a relationship with the user in one embodiment. User interface **400** includes an element **405** that indicates the users **105** with which relationships have been established outside of the business network **110***b*. Note, however, that such users may or may not be registered with the meta-network **100**. As illustrated in FIG. **4**, at time T**2**, users **105***a*, **105***c*, and **105***d* are identified to user **105***b* as other users with which user **105***b* may desire to establish a business relationship. Other users with which no relationship is currently established may also be invited. For example, such a user may be invited by entering an email address of the user into a text box **410** and selecting control **415**.

In some embodiments described herein, the meta-network **100** enables a user **105** to search networks **110** for other registered users that satisfy a number of attributes specified by the user's search. FIG. **5** illustrates a sample user interface **500** presented to a user to search for users across multiple networks **110** in one embodiment. The user may specify an attribute, for example, by selecting a control **505** associated with the attribute. As another example, the user may select a control associated with a text box (not shown) and enter a keyword or phrase attribute.

In some embodiments, a user may weight the selected attributes to indicate the attributes' importance to the user's search. As illustrated in FIG. **5**, the user may change the position of a control **510** on a slider bar to manipulate the importance of the attribute to the user's search. For example, by moving control **510***c* all the way to the right, Jill may indicate that it is very important to her that identified suppliers only use organic wheat.

The meta-network **100** identifies users matching the specified attributes and determines a similarity measure for each of the identified users. The similarity measure may be a weighted average of a distance between the specified values of the attributes and the values of the attributes for a user. For example, the sliders may indicate weights of 0.25, 0.5, and 1.0 for the business type, location, and product attributes, respectively. If Jack has corresponding attribute values of wholesale, Seattle, and organic wheat, the distances may be 1.0, 0.8, and 1.0, respectively. The weighted average may be 1.0*0.25+0.5*0.8+1.0*1.0=1.65, which may be normalized to a number in the range of 1 to 100.

In some embodiments, a mapping interface based on the determined similarity measures is displayed so that the user can visually assess how closely each of the identified users match the specified attributes. The mapping interface enables the user to navigate to the profiles of the displayed users. In some embodiments, the mapping interface allows the user to invite one or more of the displayed users to establish a relationship with the user. FIG. **6** illustrates a sample mapping interface **600** presented to a user in response to a search in one embodiment. The mapping interface **600** allows the user to review the users **605** having a similarity measure within the specified attribute range. For example, the meta-network identifies a number of users **605** that match the specified attributes, including Jack and John. As illustrated, Jack (with a score of 91) closely matches the specified attributes as compared to John (with a score of 25).

FIG. **7** is a flow diagram that illustrates a process **700** used to register a user **105** with the meta-network **100** in one embodiment. In some embodiments, the process **700** is performed by meta-network management application **120**.

At block **705**, the process receives a request from a user **105** to register with the meta-network **100**. For example, the request may be received in response to the user **105***b* selecting control **205** of interface **200**. As another example, the request may be received in response to a user that is not currently registered with the meta-network accepting an invitation to establish a relationship with a registered user **105** in a network **110**, as described herein.

At block **710**, the process registers the user with the meta-network. Details regarding registration are known and well documented, and thus need not be described in detail in order to gain an understanding of the concepts and operation of the process introduced herein. In some embodiments, the user is automatically registered with the meta-network based on a user's profile that is accessible to the meta-network through the network **110**. While in other embodiments, the user manually enters all or a portion of the profile information used to register the user.

At block **715**, the process maps the user's network ID to the assigned meta-network ID of user. For example, because user **105***b* initiates the registration process through the business network **110***b*, the business network identifier of user **105***b* ("B-BN") is mapped to the assigned meta-network ID of user **105***b*.

At block **720**, the process identifies the relationships that the user **105** has already established in the network **110**. For example, if user **105***b* registers with the meta-network **100** through the business network **110***b*, the process will not identify any relationships because user **105***b* has not established any relationships in the business network **110***b* at time T**2**. At a block **725**, the process stores the identified relationships. After block **725**, the process returns.

After a user **105** has registered with the meta-network **100**, the user may register other network IDs of the user with the meta-network. In some embodiments, the registration process **700** includes registering other network IDs of the user with the meta-network. FIG. **8** is a flow diagram that illustrates a process **800** used to register a network identifier of a user **105** with the meta-network **100** in one embodiment. To facilitate description, it is assumed that after user **105***b* registers with the meta-network **100** as described in connection with FIG. **7**, user **105***b* registers his or her social network ID ("S-BN") with the meta-network.

At block **805**, the process receives a request to register a network ID with the meta-network. For example, the request may be in response to the user **105** selecting from a list of networks **110**, those networks with which the user is registered and desires to register with the meta-network **100**. At block **810**, the process displays an interface for the user to log into the requested network.

At block **815**, the process determines whether the login was successful. If the login was successful, the process continues at block **820**. Otherwise, the process returns to block **810**. In some embodiment (not shown), if a threshold number of login failures is detected, the process ends. In such embodiments, an error may be displayed to the user and/or logged for further processing.

At block **820**, the process maps the requested network ID to the meta-network ID of the user. For example, as shown in FIG. **1**B, user **105***b* is assigned meta-network ID **2**, which is mapped to the social network ID of user **105***b* ("B-SN") and to the business network ID of user **105***b* ("B-BN").

At block **825**, the process identifies the user's established relationships in the mapped network. For example, as shown in FIG. **1**B, at time T**2**, user **105***b* has established relationships in the social network **110***a* with users **105***a*, **105***c*, and **105***d*. At block **830**, the process stores the identified relationships. After block **830**, the process returns.

After a user **105** has registered each of the user's network IDs with the meta-network **100**, the user may invite other

users to establish a relationship with the user in any of the user's networks **110**. FIG. **9** is a flow diagram that illustrates a process **900** used to invite a user to establish a relationship in one embodiment.

At block **905**, the process receives a request to invite one or more users to establish a relationship. Such a request may be received, for example, when a user **105***b* navigates to the meta-connect interface **300** and selects control **310**.

At block **910**, the process displays an indication of users **105** with which relationships have been established in other networks **110**. For example, FIG. **4** illustrates a sample user interface **400** that may be presented to a user to invite one or more users to establish a relationship with the user in one embodiment.

At block **915**, the process receives a selection of one or more users with which the user desires to establish a relationship in a network **110**.

At block **920**, the process sends an invitation to the one or more selected users. The invitation is sent using either a provided email address or ID of the user through the conventional invitation mechanism of the network **110** from which the meta-network is accessed. For example, user **105***b* may invite user **105***a* and user **105***d* to establish a relationship with user **105***b* in the business network **110***b*. The invitation may be sent using the invitation mechanism of the business network **110***b* and the social network ID of user **105***a* ("A-SN") and user **105***d* ("D-SN").

In some embodiment (not shown), the process may determine whether one or more of the selected users are registered with the network **110**. In such embodiments, when a selected user is registered with the network **110** (such as, e.g., user **105***d*) the process may send the invitation using the network ID of the user (e.g., "D-BN"). After block **920**, the process returns.

FIG. **10** is a flow diagram that illustrates a process **1000** used to respond to a received invitation in one embodiment. To facilitate description, it is assumed that users **105***a* and **105***d* receive an invitation from user **105***b* to establish a relationship in the business network **110***b* (see, e.g., FIG. **1**C).

At block **1005**, an invitation to establish a relationship is received. For example, an email comprising the invitation may be received by user **105***a*. As another example, an invitation may be received at the network **110***b* and stored such that when user **105***d* logs into the business network **110***b* an indication of the invitation is displayed (e.g., control **315** of interface **300** may include an indication of received invitations).

At block **1010**, the process determines whether the invitation is accepted. If the invitation is accepted, the process continues at block **1015**. Otherwise, the process ends.

At block **1015**, the process determines whether the recipient is registered with the meta-network **100**. For example, the process determines whether a meta-network ID is mapped to a network ID and/or an email address of the recipient. As illustrated in FIG. **1**B, at time T**2**, user **105***d* is registered with the meta-network and user **105***a* is not registered. If the recipient is registered with the meta-network, the process continues at block **1020**. Otherwise, the recipient registers with the meta-network through the process **700**, and then the process continues at block **1020**.

At block **1020**, the process determines whether the recipient is registered with the network **110** for which the invitation is received. If the recipient is registered with the network **110**, the process continues at block **1025**. Otherwise, the recipient registers with the network **110** at block **1030**. After block **1030**, the recipient registers the network ID with the meta-network **100** through the process **800**, and then the process continues at block **1035**.

At block **1025**, the process determines whether the network ID of the recipient is registered with the meta-network **100**. For example, this may be accomplished by determining whether the meta-network ID of the recipient is mapped to a network ID of the network **110**. If it is, the process continues at block **1035**. Otherwise, the process registers the network ID with the meta-network through the process **800**, and then the process continues at block **1035**.

At block **1035**, the process stores the relationship in the meta-network **100**. For example, table **135** of FIGS. **1**B and **1**C illustrate information stored by the meta-network **100**, at times T**2** and T**3**, describing the relationships of user **105***b* in the business network **110***b*.

At block **1040**, the process sends an indication that the invitation is accepted. For example, the indication may be included in an email that is sent to user **105***b*. As another example, screen names associated with users **105***a* and **105***d* may be added to a list of **105***b*'s connections in the business network **110***b*. After block **1040**, the process ends.

Although the subject matter has been described in language specific to structural features and/or methodological acts, it is to be understood that the subject matter defined in the appended claims is not necessarily limited to the specific features or acts described above. Rather, the specific features and acts described above are disclosed as example forms of implementing the claims. Accordingly, the invention is not limited except as by the appended claims.

The invention claimed is:

1. A system comprising:

a memory storing computer-executable instructions of:

a user registration component of a meta-network configured to register a user with the meta-network;

a network registration component of the meta-network configured to register with the meta-network a first network identifier (ID) of the user corresponding to a first network to which the user is registered and a second network ID of the user corresponding to a second network to which the user is registered;

an identification component of the meta-network configured to, after the first network ID has been registered with the meta-network, identify using the first network ID one or more users that are registered to the first network with which the user has established a relationship in the first network but has not established a relationship in the second network;

an interface component of the meta-network configured to display the identified users; and

an invitation component of the meta-network configured to receive a selection of the identified users and send an invitation to invite the selected users to establish a relationship with the user in the second network; and

a processor that executes the computer-executable instructions stored in the memory.

2. The system of claim **1** wherein the meta-network stores information describing the user, a plurality of networks to which the user belongs, and relationships that the user has established in the plurality of networks.

3. The system of claim **1** further comprising an email component configured to receive at least one email address and send an invitation to a user associated with the at least one email address.

4. The system of claim **1** wherein the first network is the meta-network.

5. The system of claim 1 further comprising a search component configured to receive one or more user-specified attributes and identify users that are registered with a plurality of networks and that satisfy the user-specified attributes.

6. The system of claim 5 wherein the one or more user-specified attributes are weighted to indicate a level of importance.

7. A method for providing relationship information across multiple networks, the method comprising:

providing a meta-network through which users register their affiliations with the multiple networks;

receiving from a user a request to invite other users to establish a relationship with the user in a second network of the multiple networks;

identifying relationships that the user has established with other users in the multiple networks, each relationship in a first network between the user registered with the first network and another user registered with the first network such that the user and the other user do not have a relationship in the second network;

displaying the identified relationships with the other users so that the user can view relationships across multiple networks without the user having to access each network separately;

receiving from the user a selection of one of the other users; and

sending an invitation to the selected other user to establish a relationship with the user in the second network.

8. The method of claim 7 wherein the identifying relationships includes accessing the multiple networks to retrieve relationship information and storing the retrieved relationship information in a data store of the meta-network.

9. The method of claim 8 including periodically re-accessing the multiple networks to update the relationship information.

10. The method of claim 7 further comprising, receiving an invitation to establish a relationship with another user in a distinguished network with which the user is not registered;

registering the user with the distinguished network;

mapping a meta-network ID of the user to a distinguished network ID of the user corresponding to the distinguished network; and

establishing a relationship with the other user in the distinguished network.

11. The method of claim 7 wherein the meta-network is one of the multiple networks.

12. The method of claim 7 further comprising, in response to receiving a request to identify users satisfying one or more user-specified attributes, identifying at least one user registered with the meta-network that satisfies the one or more user-specified attributes; and displaying the at least one identified user.

13. The method of claim 12 wherein the one or more user-specified attributes are weighted to indicate a level of importance.

14. A computer-readable memory comprising instructions that, when executed by a computer system, cause the computer system to:

assign a user a meta-network identifier (ID);

map the assigned meta-network ID to a first network ID corresponding to a first network to which the user is registered and a second network ID corresponding to a second network to which the user is registered;

identify using the network ID one or more users that are registered in the first network and with which the user has established a relationship in the first network;

receive a selection of the identified users; and

send an invitation to invite the selected users to establish a relationship with the user in the second network with which the user is registered.

15. The computer-readable memory of claim 14 further comprising instructions that cause the computer system to:

in response to receiving an indication that at least one of the selected users has accepted the invitation, establish a relationship with the at least one selected user in the second network.

16. The computer-readable memory of claim 14 further comprising instructions that cause the computer system to receive an invitation to establish a relationship with another user in a distinguished network with which the user is not registered;

register the user with the distinguished network;

map the meta-network ID of the user to a distinguished network ID of the user corresponding to the distinguished network; and

store a mapping of the relationship in the meta-network.

17. The computer-readable memory of claim 16 further comprising instructions that cause the computer to send an indication that the received invitation is accepted.

18. The computer-readable memory of claim 14 wherein the second network is the meta-network.

19. The computer-readable memory of claim 14 further comprising instructions that cause the computer system to receive from the user one or more user-specified attributes;

identify at least one user registered with the meta-network that satisfies the user-specified attributes; and

display the at least one identified user.

20. The computer-readable memory of claim 19 wherein the one or more user-specified attributes are weighted to indicate a level of importance to the user.

21. The system of claim 1 wherein the relationship in the first network between the user and an identified user is established based on an invitation to join the first network and to establish a relationship in the first network.

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